Aphasia and Other Acquired Neurogenic Language Disorders

A Guide for Clinical Excellence

Brooke Hallowell
PhD, CCC-SLP
# Contents

*What Is Special About this Book* vii  
*Acknowledgments* xiii  
*About the Author* xv  

## Section I. Welcome and Introduction  
Chapter 1. Welcome to the Fantastic World of Research and Clinical Practice in Acquired Neurogenic Cognitive-Linguistic Disorders! 3  
Chapter 2. Becoming the Ultimate Excellent Clinician 15  
Chapter 3. Writing and Talking About People With Disabilities 33  

## Section II. Foundations for Considering Acquired Neurogenic Language Disorders 41  
Chapter 4. Defining and Conceptualizing Aphasia 43  
Chapter 5. The WHO ICF and Its Relevance to Acquired Neurogenic Communication Disorders 59  
Chapter 6. Etiologies of Acquired Neurogenic Language Disorders 67  
Chapter 7. Neurophysiology and Neuropathologies Associated With Acquired Neurogenic Language Disorders 87  
Chapter 8. Neuroimaging and Other Instrumentation 117  
Chapter 9. Language in the Context of Aging 133  

## Section III. The Nature of Neurogenic Disorders of Cognition and Language 151  
Chapter 10. Syndromes and Hallmark Characteristics of Aphasia 153  
Chapter 11. Cognitive-Communicative Disorders Associated With Traumatic Brain Injury 171  
Chapter 12. Cognitive-Communicative Disorders Associated With Right Hemisphere Syndrome 181  
Chapter 13. Cognitive-Communicative Disorders Associated With Dementia and Other Neurodegenerative Conditions 193  

## Section IV. Delivering Excellent Services 209  
Chapter 14. Contexts for Providing Excellent Services 211
<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>Engaging Proactively in Advocacy and Legal and Ethical Concerns</td>
<td>235</td>
</tr>
<tr>
<td>16</td>
<td>Global Aspects of Clinical Aphasiology</td>
<td>249</td>
</tr>
<tr>
<td><strong>Section V.</strong></td>
<td><strong>Assessment</strong></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Best Practices in Assessment</td>
<td>259</td>
</tr>
<tr>
<td>18</td>
<td>Psychometric Aspects of Assessment and Assessment Processes</td>
<td>279</td>
</tr>
<tr>
<td>19</td>
<td>Problem-Solving Approaches to Differential Diagnosis and Confounding Factors</td>
<td>299</td>
</tr>
<tr>
<td>20</td>
<td>Tests, Scales, and Screening Instruments</td>
<td>327</td>
</tr>
<tr>
<td>21</td>
<td>Discourse Sampling and Conversational Analysis</td>
<td>373</td>
</tr>
<tr>
<td>22</td>
<td>Documenting Assessment Results and Considering Prognosis</td>
<td>391</td>
</tr>
<tr>
<td><strong>Section VI.</strong></td>
<td><strong>Theories and Best Practices in Intervention</strong></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>Best Practices in Intervention</td>
<td>407</td>
</tr>
<tr>
<td>24</td>
<td>Theories of Intervention</td>
<td>423</td>
</tr>
<tr>
<td><strong>Section VII.</strong></td>
<td><strong>General Treatment Approaches</strong></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>General Approaches for Enhancing Cognitive-Linguistic Abilities</td>
<td>439</td>
</tr>
<tr>
<td>26</td>
<td>Facilitating Communication in People With Dementia</td>
<td>459</td>
</tr>
<tr>
<td>27</td>
<td>Counseling and Life Coaching</td>
<td>471</td>
</tr>
<tr>
<td>28</td>
<td>Complementary and Integrative Approaches</td>
<td>491</td>
</tr>
<tr>
<td><strong>Section VIII.</strong></td>
<td><strong>Specific Treatment Approaches</strong></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>Promoting Compensatory Strategies in Conversation</td>
<td>507</td>
</tr>
<tr>
<td>30</td>
<td>Enhancing Overall Expressive Language</td>
<td>519</td>
</tr>
<tr>
<td>31</td>
<td>Improving Word Finding and Lexical Processing</td>
<td>535</td>
</tr>
<tr>
<td>32</td>
<td>Improving Syntax</td>
<td>551</td>
</tr>
<tr>
<td>33</td>
<td>Improving Reading and Writing</td>
<td>561</td>
</tr>
<tr>
<td></td>
<td><strong>Glossary</strong></td>
<td>571</td>
</tr>
<tr>
<td></td>
<td><strong>References</strong></td>
<td>595</td>
</tr>
<tr>
<td></td>
<td><strong>Index</strong></td>
<td>673</td>
</tr>
</tbody>
</table>
What Is Special About this Book

Most books about acquired neurogenic disorders of language and cognition are full of important information about neurological aspects and theoretical accounts of normal and disordered language processing. Almost all of them offer content on assessment and treatment methods, with varying degrees of detail and explicit practical guidance for clinicians. More and more have focused on vital aspects of supported communication, World Health Organization models of body structure and function and life participation, quality-of-life concerns, multicultural issues, legal and ethical issues, and evidence-based practice. The aim of this book is to do all of this, with additional special emphases.

A Focus on What It Takes to Become a Truly Exceptional Clinician for People With Neurogenic Cognitive-Linguistic Challenges

What does it take to become a truly exceptional clinician? What can we do to become that person? What makes one clinician so great and another not so? It isn’t just knowledge and skill, although these are certainly crucial components of clinical excellence; it’s also a host of other qualities. What are those qualities? How does one develop them? The intent is to motivate you, foster your learning, encourage you, lead you, and support you to gain not just all-important knowledge but to practice skills and challenge attitudes and values on your path to becoming the ultimate excellent clinical aphasiologist. Sometimes for efficiency, I will be directive. Do this. Don’t do that. I offer an insider view of what many experienced experts in this area think you need to know, what you should be able to do, and what you ought to appreciate and consider. In the end, though, each reader is the one best suited to define and become the ultimate best clinician.

An Emphasis on Person-Centered, Empowering Approaches

Throughout our work in assessment, treatment, advocacy, counseling, education, and research, clinical aphasiologists have ample opportunities—and a moral imperative—to foster empowering, affirmative means of considering and coping with chronic aspects of communication challenges. In many of the clinical contexts in which we work, there is a greater focus on deficits than strengths. Many adults with neurogenic disorders struggle to be recognized as fully human and competent. Readers are encouraged to commit to strength-based, affirming approaches that heighten the self-efficacy of the people we serve.

Appreciation for and Integration of Diverse Frameworks and Theoretical Perspectives Related to Neurogenic Disorders of Language and Cognition

The excellent clinician probably does not adhere to one theoretical framework
alone and stick to that at all costs. Rather, he or she learns a great deal about multiple approaches based on multiple frameworks, integrates multiple theories in making treatment decisions, constantly reflects on the results of published treatment studies with the results observed in an ongoing way with each and every individual with a language disorder with whom he or she works, and is open to revising his or her theoretical perspectives based on new information. To that end, the reader is challenged to grasp and integrate multiple perspectives at once and to think critically about his or her own preferences, biases, and needs for further learning.

Many of us who teach and/or supervise students and beginning clinicians are especially familiar with the disconnect between what clinical students learn in their academic programs and what they feel prepared to do when working as clinical professionals. Clear guidelines, along with references to theoretical principles and research-based suggestions, are provided for how to carry out over 50 different general and specific treatment approaches. The book’s direct style and practical orientation will be useful to clinical students and professionals alike and will continue to be helpful to students long after they graduate from clinical programs.

The content in this book is intended to be relevant globally. Worldwide resources are provided, for example, in terms of related professional associations and resources to support people with neurogenic communication disorders and the people who care about them. Where content is specific to particular regions, such as in sections addressing healthcare trends and cultural factors that affect clinical practice, this is noted, along with observations regarding general trends and regional variations. Although content and resources are geared toward an English-speaking readership, numerous references point to further opportunities for clinical and research work and advocacy anywhere in the world. Global and multicultural perspectives are infused throughout.

A great deal of research on textbook needs was done before launching the writing of this book. Student interns in the master’s program in Business Administration joined forces with students from the Neurolinguistics Laboratory at Ohio University to engage in a multifaceted needs assessment. They polled over 200 students in clinical speech-language pathology (SLP) programs, instructors at over 50 different programs who teach in related areas, plus leaders of clinical programs serving adults with traumatic brain injury (TBI), dementia, and aphasia. They studied curricular requirements of over 200 academic programs in SLP to see what topic groupings most commonly were taught and in what combination. They
reviewed existing textbooks and made their own lists of desired and undesired features from students’ perspectives.

Some existing texts address specific clinical syndromes, focusing exclusively, for example, on communication and aging, aphasia, right hemisphere syndrome, or TBI. The majority of us who teach in this area must combine multiple topics within single courses or course sequences. Students and professors alike expressed greater interest in a text that combines multiple areas within one book on adult neurogenic disorders of language and cognition. A benefit is that what has been done to advance work within each specialty areas can be shared across other areas.

Examples abound. Great work on supported communication for people with aphasia can be embodied in our work on right hemisphere syndrome (RHS), TBI, dementia, and so on. Much work in interprofessional practice, individualized approaches, coaching models, and environmental systems models in TBI can be further extended to people with aphasia. Wonderful progress in focusing on reminiscence strategies, functional memory enhancement, identity support, and recognition of strengths in people with dementia can be applied to all people with all other types of neurogenic disorders. Principles of critical thinking applied to assessment and diagnostic problem solving in people with RHS can be transferred to clinical challenges when working with people with any type of neurological disorder.

Here are additional requests from students and instructors that were taken into account in the development of this text:

- A useful clinical resource for years to come, not just for a course
- Inclusion of multicultural and multinational content as well as content on counseling, ethics, and legal aspects of working with people with neurogenic communication disorders
- Recognition of the importance of interdisciplinary and interprofessional education, research, and clinical practice
- Coverage of the broad spectrum of the science and art of clinical practice
- Thorough coverage of diagnostic processes, including extensive resources on assessment tools
- A process analysis approach for analyzing communicative performance and strategically interpreting results of ongoing assessments infused throughout intervention
- An evidence-based how-to guide to treatment with clear guidelines on how to carry out treatment approaches
- Strong theoretical foundations
- A friendly and personal but academically rigorous style
- Functional and practical approaches
- Key terms bolded within the chapter and listed in a glossary
- Diagrams, charts, illustrations, summary tables, and a detailed index
- Substantial up-to-date references
- Use of gender-attuned and person-first language, embracing and inclusive of readers, colleagues, and the people we serve clinically regardless of race, ethnicity, gender, age, or sexual orientation
- Clear and concise clinical examples to ensure relevance of information based on realistic scenarios
• Complementary online materials with links to videos and other teaching/learning resources
• Size and weight such that the book is not cumbersome to carry or impossible to fit in a backpack
• Affordability

That’s a tall order! We invite you to provide feedback on how we may do better in terms of any of these goals in future editions of this text.

Incorporation of Adult Learning Theory and Evidence-Based Pedagogy

Pedagogic approaches embraced in the design of this book consist of two broad categories: those directly implemented in the structure and content of the book and those recommended through learning activities, online resources, and suggestions to instructors. The book content incorporates means of guiding readers through levels of learning akin to the components of Bloom’s Taxonomy (Bloom, 1956): conceptual development, synthesis, analysis, and application to content already mastered and fostering of broader understanding with perspectives on new applications. However, the levels of learning are treated as interdependent, not linear and hierarchical, as if one must pass from one level to the next. A focus on the reader’s own development as a clinician (“personal characteristics” within the adult learning framework; see Cross, 1981) is intertwined with potential “situational characteristics” for his or her learning (e.g., independent study, online or in-person coursework, studies to complement clinical practicum).

Query-Based Approach and Enlivening of Learning Objectives

Any of us who study the complex relationships between cognitive-linguistic abilities and the brain, and between cognitive-linguistic challenges and quality of life, are aware that the more we learn, the more questions we generate for ourselves and others. There are few definitive or concrete answers to clinical questions in the world of aphasiology. Still, it is vitally important that we continue to ask questions and do our best to probe for answers. In this light, this book is organized around queries—probing questions that have varied levels of superficiality and profundity, of simplicity or complexity, and of definitiveness or open-endedness to a vast array of possible answers. I hope that you will find it useful to pose these queries to yourself as an upcoming or established clinician. I hope you will find queries that tempt you further into an even deeper dive into this fascinating world.

Queries tend to make us contemplate and make associations related to our possible responses before we actually start to answer them; they foster reflection. “It is in the interstices between the questions and the answer that minds turn,” observes Weimer (2014, p. 1). Any query ideally leads to new reader-generated queries, encouraging self-directed study so vital to adult learning and critical thinking (Brookfield, 2012; Knowles, 1984). A secondary benefit of the query structure is that it clarifies the learning objectives related to each content area. Readers may use the queries as opportunities for self-assessment as they study, reflect, and answer the queries in their own words.
And for instructors who tailor assessments to the contents, this structure may help address the age-old question from students, “What will be on the test?”

Engaged Learning

Many of the exercises in the Activities for Learning and Reflection sections are offered in a learn-by-doing rather than just a learn-by-reading mode. Although students certainly can learn through lectures and readings, means of ensuring active engagement with what they are learning helps to ensure better retention and likelihood of application (Fink, 2003; Kember, Ho, & Hong, 2008). As readers attach personal relevance to what they are learning, they are more likely to take ownership of the corresponding content.

Cycling Approach

It is important to have redundancy of information, not presented the same way over and over again, but one aspect of coverage of a topic complementing another. For example, we explore life participation approaches to aphasia as one of the frameworks for conceptualizing aphasia and then revisit it throughout the book. We consider it as a model to use in contextualizing specific approaches to intervention (such as neuropsychological or psycholinguistic approaches). We also consider its relevance to advocacy and to education of people with language disorders and the people who care about them.

Adaptability for Multiple Pedagogic Methods for Classroom-Based Courses, Independent Study, and Online Coursework

The book is organized to be adaptable for varied teaching and learning methods. A flipped classroom approach (see Keengwe, Onchwari, & Oigara, 2014) may be ideal for content that students need to study primarily on their own, such as terminology, basics of neurophysiology, and the blood supply to the brain, prior to integrating the related to knowledge into in-class activities and discussions. It can also be optimal when students study about assessment and treatment methods before related hands-on activities and discussion. Using the learning activities sections in each chapter to prepare ahead of class sessions can also be effective in this regard and can be combined with collaborative learning methods.

Team-based and collaborative learning (Abdelkhalek, Hussein, Gibbs, & Hamdy, 2010; Barkley, Major, & Cross, 2014; Johnson & Johnson, 2009; John-Steiner, 2006; Michaelsen, Sweet, & Parmelee, 2008; Millis & Cottrell, 1998; Stribjols & Fischer, 2007), case-based learning (Chabon & Cohn, 2011), and problem-based learning (Jin & Bridges, 2014; Lawlor, Kreuter, Sebert-Kuhlmann, & McBride, 2015; Prosser & Sze, 2014) are all directly amenable to teaching and learning related to the contents of this book. Service-learning approaches (Corless et al., 2009; Kosky & Schlisselberg, 2013; Sabo et al., 2015; Stevens, 2009) are ideal for much of the practical content in this book. Examples of related projects include providing in-services at a health-care agency, assisting with a caregiver support group,
developing reminiscence projects for residents of a long-term care facility, or developing a respite volunteer program for adults with neurological disorders in your local community. Such activities are also amenable to study-abroad global-health projects, if carefully designed with clear ethical principles in mind (Hallowell, 2012b).

Additionally, students engaged in interprofessional learning opportunities (Interprofessional Education Collaborative Expert Panel, 2011; World Health Organization, 2010; Zraick, Harten, & Hagstrom, 2014) may make use of several aspects of this book. For example, basic content will ideally lead to an appreciation for the types of interdisciplinary and interprofessional teams and collaborations through which much work in aphasiology is accomplished. Additionally, suggestions for outreach, advocacy, counseling, and global health experiences may be carried forth in planning interprofessional activities among students, academic and clinical faculty members, and community groups or agencies.

**Online Materials**

Supplemental materials include PowerPoints to guide discussions pertaining to content in each chapter, additional discussion points and learning activities, links to video examples and helpful online resources, and a test bank that includes multiple-choice, fill-in-the blank, matching, true/false, short-answer, and essay items, all cross-referenced to the content areas addressed. Visit the companion website and explore: http://www.pluralpublishing.com/publication/aoanld

If you have ideas you would like to share for the website for the next edition of this book, please be in touch.

**About the Book Cover**

The phoenix rising from a changed brain represents the human spirit moving onward and upward from neurological challenges. It is a symbol of honor and affirmation for people with neurogenic communication disorders and the people who care about them—all of whom ideally continuously heal and re-create themselves with the strengths they still have, even discovering new strengths along the way.

Cover design by Taylor Reeves.
Acknowledgments

Profound motivation for this book has come from numerous people who have shared with me deeply about their own experiences as phoenixes rising from challenges of changed brains; in this light I especially thank Seth Teicher, Jane Hamlin, and Deb Dakin. I acknowledge the initial inspiration for this book from my precious friend Sadanand Singh, who convinced me that it had an essential purpose and that I would be the right vehicle for it. I thank, too, my longtime buddy and partner in global shenanigans, Angie Singh, for love and encouragement and for not letting that inspiration diminish.

While writing this book, I lost my beloved father; also, as if I needed to experience the content firsthand, I personally experienced a mild traumatic brain injury and became a rehabilitation patient myself. I thank my treasured friends who gave me fortitude in coping and also helped me see how I could use those experiences to enrich my voice as a writer and teacher. Many thanks especially to Manon Floquet, Mary Nossek, Geoff Baker, Molly Morris, Tim Lavelle, Karen Sol, Kartini Ahmad, John Burns, Patty Mitchell, Dianne Bouvier, Xia Jing, Pete Norloff, Dixon Cleveland, the Athens Friends Meeting community, the Llewellyn Beach community, and the Lost in Lodi Arm-wrestling clan, all of whom helped me stay grounded and maintain my inner joy.

I extend warm thanks to the amazing students who have helped with a great deal of background work, most especially Laura Chapman and Cheyenne Weaver, and the gifted artist behind most of the illustrations in this book, Taylor Reeves. Special appreciation goes to Nicole Byram and Seth Breitenstein for their extensive needs analysis that helped determine what it is that students and instructors most wanted in such a book. I also thank additional students and graduates who helped with editing, literature updates, feedback, and development of companion website materials, including Javad Anjum, Sarah Cappelletty, Paige Crombie, Colleen Curts, An Dinh, Ellen Frescoln, Mohammad Haghighi, Sabine Heuer, Holly Hinshelwood, Kelly Holmberg, Maria Ivanova, Courtney Kaylor, Maria Modayil, Thea Nihiser, Kacy Overman, Kelsey Richards, and Lindsey Richards. I am indebted, too, to all of the students in my courses over the past several years who have been fundamental in considering how to prioritize content, enhance readers’ active engagement, and keep our focus on empowering people to communicate.

I have been honored by thoughtful suggestions, feedback, and support from numerous colleagues, especially Barbara Shadden, Terry Wertz, Pam Smith, Michelle Bourgeois, Darlene Williamson, HyangHeeKim, Hughlet Morris, Lynn Maher, Craig Linebaugh, Travis Threats, N. Shivashankar, Zhuoming Chen, Sonal Chitris, Roberta Elman, Melinda Corwin, Kathryn Atkinson, Janet Hawley, and my adept anonymous reviewers. I appreciate, too, the staff at Plural Publishing, especially to Scott Barbour and my diligent editor, Kalie Koscielak, production manager, Megan Carter, production assistant, Alya Hameed, and other essential experts,
including Valerie Johns, Nicole Bowman, and Kristin Banach.

Throughout the experience of developing this book, I continued to draw inspiration from colleagues dedicated to making life better for people with acquired neurogenic cognitive-linguistic disorders through the Clinical Aphasiology Conference, Aphasia United, the National Aphasia Association, and Aphasia Access. Finally, I am extremely grateful to members of my family who’ve supported and tolerated me all along, especially Rick Linn, Nicholas Hallowell Linn, Elizabeth Hallowell Linn, Nikki Byram, Max Rego, Kirk Hallowell, Vickie Kracke, Todd Hallowell, Harold Smith, Julia Linn, Jean Comfort Hallowell, Becka Bonnell, Anne Marble, Becka Dresser, Peggy Marble, Willie Hallowell Linn, and all of the rest of our sweet eclectic network of kin.
About the Author

Brooke Hallowell, PhD, CCC-SLP, brings to this book over 25 years of clinical, research, teaching, and advocacy experience to support adults with acquired neurogenic communication challenges. Dr. Hallowell is active in research and advocacy related to aphasia and other neurogenic language disorders as well as aging and end-of-life care. She serves on boards and task forces of several national and international organizations, including the Aphasia and Stroke Society of India, Aphasia United, and the National Aphasia Association. She serves as editorial board member and reviewer for many scholarly journals and reviewer for several granting agencies, including the National Institutes of Health (NIH). Dr. Hallowell has garnered over U.S.$14 million in funded grants, with extramural support from such agencies the NIH, National Science Foundation, Health Resources Service Administration, and the Ohio Department of Aging. A former President of the Council of Academic Programs in Communication Sciences and Disorders (CAPCSD), she chaired the first-ever Global Summit on Higher Education in Communication Sciences and Disorders in 2012 and is deeply engaged in developing new academic and clinical programs, especially in underserved regions of the world. A Fellow of the American Speech-Language-Hearing Association (ASHA), Dr. Hallowell is also the recipient of the 2015 Asia Pacific Society in Speech-Language-Hearing Association Outstanding Contribution Award, the 2014 CAPCSD Honors of the Council, and the 2013 ASHA Certificate of Recognition for Outstanding Contributions in International Achievement, and is a former Fulbright Fellow, and U.S. national Finalist for the Thomas Ehrlich Award for Service Learning.

Dr. Hallowell holds a BA from Brown University, an MS from Lamar University, a certificate of Etudes Supérieures from the Conservatoire National de France, and a PhD from the University of Iowa. She serves as Executive Director of the Collaborative on Aging, Professor and Coordinator of PhD Programs in Communication Sciences and Disorders, Director of the Neurolinguistics Laboratory, Adjunct Professor of Family Medicine, Adjunct Professor of Biomedical Engineering, Professor of Southeast Asia Studies, Professor of International Development Studies, and Supervisor of the Aging and Gerontological Education Society and the Respite Volunteer Program at Ohio University.
She previously served as Associate Dean for Research and Sponsored Programs in College of Health and Human Services; Director of the School of Hearing, Speech and Language Sciences; founding Co-Director of the Global Health Initiative; founding Coordinator of the Diabetes Research Initiative; and Co-Director of the Appalachian Rural Health Institute at Ohio University.

Having had selective mutism as a child and having been an extremely shy person into young adulthood, she entered the realm of clinical aphasiology with a personal connection to those who have important things to say but are not able to express them fully. Being the mother of a child with a severe traumatic brain injury who is now a thriving and extremely competent adult, she has firsthand knowledge about what it is that people need and want during the course of rehabilitation. According to Dr. Hallowell, these experiences are a large part of what drives her passion to help clinicians and clinicians-in-training focus not only on gaining clinical knowledge and skill but also on wisdom, compassion, and other characteristics that will propel them toward ultimate excellent clinical competence.
Welcome to the Fantastic World of Research and Clinical Practice in Acquired Neurogenic Cognitive-Linguistic Disorders!

I could not imagine any academic or professional pursuit more rewarding than diving into the amazing world of adult neurogenic disorders of cognition and language. I took my first dive just over 30 years ago as an undergraduate student. Whether you are a certified speech-language pathologist (SLP), a neuroscientist with clinical interests, a student, or an otherwise engaged reader, and whether you are immersing yourself or just getting your toes wet in this clinical arena, I hope that you find your experience with this book and with this topic informative, inspiring, and challenging.

After reading and reflecting on the content in this chapter, you will ideally be able to answer, in your own words, the following queries:

1. What are acquired neurogenic cognitive-linguistic disorders?
2. Which neurogenic communication disorders are not acquired cognitive-linguistic disorders?
3. What is clinical aphasiology?
4. What is so fantastic about the world of neurogenic communication disorders?
5. What disciplines are relevant to aphasiology?
6. What is known about the incidence and prevalence of acquired neurogenic language disorders?
7. Where do aphasiologists work?
8. What is the career outlook for clinical aphasiologists?

What Are Acquired Cognitive-Linguistic Disorders?

When we talk about “aphasia and related disorders,” we are typically referring to acquired neurogenic language disorders and acquired cognitive-linguistic disorders. These are any of a wide array of disorders of language formulation, comprehension, and cognitive processing caused by problems in the brain of a person who had previously acquired language. They are part of a larger category of acquired...
neurogenic communication disorders, which also includes neurogenic speech disorders, most commonly referred to as motor speech disorders.

The definitions, etiologies, and descriptions of specific types of acquired neurogenic language disorders are discussed in detail in subsequent chapters. As a means of introduction here, let us briefly consider which types of disorders constitute acquired neurogenic language and cognitive-linguistic disorders versus other types of communication disorders.

Aphasia is by definition an acquired language disorder. Ever since the term aphasia was first coined by in 1864 by Armand Trousseau (Tesak & Code, 2008), it has been defined in many ways. Aphasia has also been examined from a multitude of perspectives or frameworks, each of which may lead people studying aphasia to focus on specific aspects of how it is defined. The wide array of perspectives from which we might consider, study, and theorize about aphasia need not distract us from clarity in defining just what it is and is not. If you plan to work with people who have aphasia in any context, it is vitally important that you be able to clearly and succinctly define what aphasia is. A simple way to do this is make sure that, however you define it, you include four elements in your definition:

1. It is acquired.
2. It has a neurological cause.
3. It affects reception and expression of language across modalities.
4. It is not a sensory, psychiatric, or intellectual disorder.

We will consider each of these elements in more detail in Chapter 4. We will also explore how, as individual scholars and clinicians, we might choose different words to define aphasia based on our preferred theoretical perspectives regarding aphasia.

Dyslexia is a reading disorder that may or may not be an actual language disorder per se. Deep dyslexia is a language disorder. This form of dyslexia and its varied manifestations entail problems of actual linguistic processing of written material, as opposed to more superficial visual processing of the physical characteristics of graphemes (any written representation, such as letters, words, and punctuation marks, and characters in non-Western scripts).

Dysgraphia is a writing disorder. Like dyslexia, it has deep and superficial forms; the deeper forms, which entail converting semantic content to graphemes, are those that qualify as true language disorders. Both dyslexia and dysgraphia may be congenital (present from birth or at the earliest stages when associated abilities are typically manifested during development) or acquired. Dyslexia and dysgraphia occur as symptoms of aphasia but may also occur as distinct acquired neurogenic language disorders in people without aphasia.

We will consider the notion of literal and conventional uses of the a- and dys-prefixes further in Chapter 3. For now, note that although the term aphasia is most often used instead of dysphasia, the term dyslexia tends to be used instead of alexia (the latter literally meaning the complete loss of reading ability).

Several other types of acquired cognitive-linguistic problems result from injuries to the brain that affect behavior, information processing, emotional regulation, perception, and other important aspects of everyday functioning in our
information-rich and social world. Cases in which a language problem is secondary to a cognitive problem are broadly categorized as cognitive-linguistic disorders, not simply language disorders. Some categories of neurogenic cognitive-linguistic disorders are referred to according to symptom constellations; they have labels that are based on one or more impairments (e.g., dyslexia, dysgraphia). Others are referred to according to the associated cause. For example, one might refer to cognitive-linguistic disorders associated with traumatic brain injury (TBI) to capture any of a constellation of symptoms related to language and information processing that may occur due to TBI. Some have labels associated with an underlying cause, even though the etiology is not incorporated into the label. For example, a favored term for language problems resulting from dementia is language of generalized intellectual impairment. A favored term for language problems associated with transient confusional states is language of confusion. Still other categories of neurogenic cognitive-linguistic disorders are referred to according to the location of the injury to the brain that caused the loss (e.g., right hemisphere syndrome [RHS], also called right brain syndrome [RBS]).

Which Neurogenic Communication Disorders Are Not Acquired Language Disorders?

Once you are clear about what acquired neurogenic cognitive-linguistic disorders are, you can distinguish them from other disorders that do not fit into this category. By general convention, any problem that a person is born with is not an acquired disorder. Neurological syndromes present from birth, including developmental language disorders associated with cognitive and learning disabilities or delays, are not acquired. Thus, we do not consider them within the scope of this book. This distinction is important. The result of losing a previously acquired cognitive or linguistic ability is very different from not having ever developed such an ability in the first place. The result is different in terms of actual brain structure and function. It is also different in terms of the ways that people (and their caregivers and others who are important to them) cope with their disabilities, the specific types of intervention that may be helpful, and the ways in which diagnostic and treatment services might be made available. Of course, people who have congenital disorders may also at some point have a stroke or TBI and may develop dementia.

In light of the crucial differences between congenital and acquired disorders, most experts agree that the term child aphasia, as used previously to capture the notion of a congenital language disorder, is a misnomer. Aphasia, by definition, is acquired. The preferred term for a condition characterized by language deficits in the face of relatively age-appropriate cognitive abilities in children is specific language impairment. Certainly, a child may experience a stroke or traumatic brain injury resulting in a true aphasia; in such cases, it is appropriate to classify the condition as an acquired language disorder. Still, the course of recovery and the means of intervention are likely to be different in significant ways compared to acquired aphasia in adults.

The most common acquired neurogenic motor speech disorders are apraxia of speech (a problem of motor programming
for speech articulation) and dysarthria (a problem of innervation of the speech mechanism for articulation). Although many people with neurogenic language disorders also have motor speech disorders, knowing how to distinguish these general categories of disorders is vital to clinical excellence. Although motor speech disorders are addressed in this book in terms of clinical problem solving and differential diagnosis in people who also have language disorders, they are not a primary focus of this book.

What Is Clinical Aphasiology?

Because of the overlapping areas of scientific and clinical knowledge and skill involved, and because of the contexts in which we tend to work, many professionals who specialize in research and/or clinical practice in aphasia (aphasiologists in the literal sense) are also expert in related neurogenic cognitive-linguistic, speech, and swallowing disorders in adults. When we use the term aphasiology, we tend to incorporate topics related to the vast clinical and scientific aspects of these varied areas, even though the literal sense of term is more restricted. For example, if you were to attend the Clinical Aphasiology Conference or a conference of the Academy of Aphasia (annual international meetings for research aphasiologists) or read the journal Aphasiology, you would be exposed to numerous topics reaching beyond the specific syndrome of aphasia per se. Keep this in mind as you continue to read this book, as the term aphasiologist (erring on the side of being too specialized) is sometimes used interchangeably with the term SLP (erring on the side of being too general, as not all SLPs are truly expert in working with people who have neurogenic cognitive-linguistic disorders).

What Is So Fantastic About the World of Neurogenic Communication Disorders?

There are many enticing aspects of working and studying in the realm of clinical aphasiology. I will describe a few of my favorite here in this list of things that we clinical aphasiologists get to do.

We Work With Wonderful People and Become Part of Their Rich Life Stories

People with acquired neurogenic cognitive-linguistic disorders and the people who care about them are diverse in every aspect: age, ethnicity, race, language, education, sexual orientation, life experience, personality, preferences . . . you name it. As we discuss in more detail later in this book, when a person acquires aphasia or a related disorder, all aspects of his or her life may be affected, not just his or her cognitive-linguistic abilities. Thus, all aspects of his or her life are relevant to our work. Clinical aphasiologists don’t simply learn about a medical diagnosis, treat it in some prescriptive way, and then discharge a person from treatment. We get to learn about people’s assorted interests and hobbies and how language use is relevant to them. We often become part of the fabric of life change and adjustment, helping consider alternatives and possibilities, listening to life stories, and nurturing fresh perspectives. We get to assist in their career and educational considerations and help inform family members,
friends, and professionals about how to best support them.

**We Are Catalysts for Positive Change**

A problem with communication affects every aspect of our lives and the lives of those around us. Given that people with aphasia maintain their intellectual abilities, it is rewarding to help them find creative ways to improve their communication abilities. The fact that there is much that can be done to make a difference in people’s everyday activities and interactions makes it especially gratifying to work in this arena.

**We Enjoy Empowerment of Others Through Advocacy and Leadership**

Beyond our direct clinical work, we also work to raise awareness of the importance of communication as a basic human right and of the need to protect that right for people with communication disabilities. Many of us become leaders in our professional contexts as well as in local, national, and international professional organizations. Our roles as leaders can help us become powerful catalysts not only for awareness but also for social reform and policy changes.

**We Enjoy a Great Deal of Humor and Fascination**

The types and variety of errors associated with linguistic structure and social language use in people with aphasia are vast. Some of the linguistic errors and communicative mishaps we observe are not only fascinating; they can also be charming, quirky, and downright funny. In some clinical situations, there is a fine line between enjoying humor about something a person has said or done and respecting his or her dignity as a person with a serious disability. In general, though, enjoyment of fun and laughter throughout rehabilitation and recovery is shared among all involved, especially people with language disorders themselves. One of the delightful aspects of working with a primarily adult population is that there is much more tolerance for humor at a metalinguistic level than there can be when working with children. People with aphasia, for example, often have a wonderful sense of humor about their own unintended utterances—and about consequences of unintended aspects of communication—in their daily lives.

**We Enjoy Fantastic Local and Worldwide Professional Networks**

In light of the vastness of life consequences associated with acquired neurogenic communication disorders and the interdisciplinary nature of the work of aphasiologists, we depend on teamwork with a host of professionals in our local clinical and research work environments. Additionally, there are wonderful local, state/regional, national, and international organizations and networks that bring together and foster continuing education of aphasiologists. Information about some key professional organizations and how to get involved are given later in this chapter.

**Our Work Is Multicultural and Multilingual**

If you love working across languages and cultures, there are ample opportunities